

ABSTRACT

This invention entails a method for solubilizing and recovering, in bioactive and isolated form with retained native state configuration, a target peptide from a host organism in which the heterologous polypeptide is present in insoluble form.

- 5 Broadly this method comprises (i) disrupting the host cell to produce a lysate (ii) recovering lysate precipitate containing the polypeptide (iii) resuspending the lysate precipitate in a denaturant-free, non-buffered solubilization solution to produce a solubilization preparation that comprises both sodium hydroxide between about 8 and about 10 mM and the target peptide between about 1 and
10 about 4 mg peptide per ml solubilization solution, wherein the resultant solubilization preparation has a pH of between about 9 and about 11.2; (iv) recovering supernatant from the solubilization preparation containing non-denatured target peptide. Optionally, stabilizing compounds and detergents are employed. The invention further comprises isolated insoluble proteins in bioactive
15 form and native state configuration.